#### COSMOS 1970-1972 ULLAGE MOTOR

1988-085G

19537

### SATELLITE DATA

TYPE: Mission Related Debris

OWNER: CIS

LAUNCH DATE: 16 Sep 1988

DRY MASS (KG): 55

MAIN BODY: Ellipsoid; 0.6 m diameter x 1.0 m length

MAJOR APPENDAGES: None ATTITUDE CONTROL: None

ENERGY SOURCES: On-board propellants

### **EVENT DATA**

DATE: 9 Mar 1999 LOCATION: Unknown TIME: Unknown ASSESSED CAUSE: Propulsion

ALTITUDE: Unknown

### **POST-EVENT ELEMENTS**

EPOCH: 99067.36656961 MEAN ANOMALY: 189.8576

RIGHT ASCENSION: 108.7309 MEAN MOTION: 4.28860956162171

INCLINATION: 64.6425 MEAN MOTION DOT/2: .00000813 ECCENTRICITY: .5827119 MEAN MOTION DOT DOT/6: 00000-0 ARG. OF PERIGEE: 176.8483 BSTAR: .0022335

## **DEBRIS CLOUD DATA**

MAXIMUM ΔP: Unknown MAXIMUM ΔI: Unknown

## **COMMENTS**

This is the 19<sup>th</sup> event of the Proton Block DM SOZ Ullage Motor class identified to date; it is the eighth associated with a GLONASS mission. This mission was conducted before the engineering defect was identified and passivation measures implemented. In this orbit, debris may be long-lived but hard to track. 17 debris objects were detected.

# REFERENCE DOCUMENT

<sup>&</sup>quot;Abandoned Proton Ullage Motors Continue to Create Debris", <u>The Orbital Debris Quarterly News</u>, NASA JSC, April 1999.